

THE FLORIDA WATER-RAT (NEOFIBER ALLENI) IN
OKEFINOKEE SWAMP, GEORGIA

BY FRANCIS HARPER

[Plate 3]

At the present time, while energetic efforts are being made by the Okefinokee Society to save this paradise of woods and waters from complete destruction by lumbering and other commercial operations, it seems worth while to call attention to one of its most recently discovered features of zoological interest.

In 1912, during the course of reconnaissance work by Dr. A. H. Wright and others of the Cornell expedition,¹ as well as by the writer, some curious grass nests, of mammalian manufacture, were noticed on Floyd's Island Prairie. Nothing more than conjectures could be made at that time regarding the identity of the nest-makers, since no specimens were obtained, and since there were no published records of *Neofiber* from farther north than Gainesville, Florida. The mystery was solved in early January, 1917, when, with the help of Jackson Lee, a resident of the swamp, I trapped here several specimens of *Neofiber alleni*.

The surface of Floyd's Island Prairie is largely occupied by sphagnum. Among the other plants growing here are "little-bladed saw-grass"² (*Scleria trichopoda?*), maiden-cane (*Panicum hemitomon*), "cat-tail" (*Erianthus saccharoides*), fern (*Anchistea virginica*), pitcher plant (*Sarracenia minor*), "hardhead" (*Xyris fimbriata*), a sedge (*Dulichium arundinaceum*), marsh St. John's-wort (*Triadenum virginicum*), and a bog herb (*Syngonanthus flavidulus*). In the more open parts of the prairie, such as the "runs" and the "gator-holes," "bonnets" (*Nymphaea macrophylla*) and "never-wets" (*Orontium aquaticum*) are common. "Little-bladed saw-grass" seems to enter chiefly into the construction of the upper part of the nest, and maiden-cane also is used. One fresh nest was made largely of fibrous roots, with a covering of maiden-cane. The foundation of another consisted of roots and coarse, matted vegetation. One of the homes was situated in a clump or tuft of "cat-tail" (*Erianthus*), and another among broom-sedge and maiden-cane. The foundations rested on top of the sphagnum rather than in the water. The water-level on the prairie at this time, however, was

¹ Cf. Wright and Harper, A Biological Reconnaissance of Okefinokee Swamp: The Birds. *The Auk*, XXX, October, 1913, pp. 477-505.

² Names in quotes are those in local use in the swamp.

somewhat lower than usual. The nests, though not exactly measured, were probably about 12 to 18 inches in diameter, and 10 to 15 inches high.

There is comparatively little open water on the prairie, and *Neofiber* here seems to be a bog inhabitant rather than an aquatic animal. Its runways lead away from the nests over the sphagnum and peat, among the stems of fern and maiden-cane. Water stands in the runways in places, but for the most part is hardly deep enough to cause the animals to swim. Here and there the runways become tunnels through the sphagnum; and one may also see where the animals have made diggings down into the bog, evidently in search of roots. Lee discovered some fern (*Anchistea*) roots that had been chewed, and we sampled them ourselves. They tasted tolerably good, suggesting a raw peanut, and were quite slippery to the tongue.

The nest chamber is in effect an anticlinal tunnel connecting with runways on opposite sides of the nest. The entrances are about at the water-level. The floor of the tunnel at its middle part, while elevated above the water-level, is not necessarily dry. In some, but by no means all, of the nests, the middle part of the tunnel was occupied by a little bed of soft and fairly dry vegetation, distinct from the mass of the nest. Perhaps these are places for the reception of the young. On January 5 my companion found in a nest two small and scantily haired young ones, with eyes not yet open. In one case the upper part of a *Neofiber* house was found to contain a little nest of finer material, evidently belonging to a rice rat (*Oryzomys palustris palustris*) which was trapped there.

We found other nests on Cowhouse Prairie and on Chase Prairie. Notwithstanding the evident abundance of the animals, we caught no glimpse of them at their nests or elsewhere. Apparently they are very shy. In the Okefinokee vernacular they are known as "prairie rats" or "water rats."